

Claims

1. A method comprising:
 - processing a user's physical sample with genetic information to produce a profile of data representative of the genetic information in the physical sample;
 - storing the profile in an accessible database;
 - 5 receiving from the user a set of access rights defining conditions under which third party users can access the profile;
 - receiving a request from a third party user to access the profile to perform a test on the data;
 - comparing the third party user's request with the access rights to confirm that
 - 10 the third party user is authorized to access the profile as requested;
 - if the third party user is authorized, performing the requested test on the profile and reporting the results to the third party user; and
 - if the third party user is not authorized, denying access.
- 15 2. The method of claim 1, wherein the access rights separately include users who can gain access and uses for which that access can be obtained, the comparing including comparing both that the third party user is allowed access and that the third party user can perform the requested test.
- 20 3. The method of claim 1, wherein performing a requested test includes identifying in the profile one of a number of genetic markers in the profile associated with certain disease phenotypes.
4. The method of claim 1, wherein receiving a request includes receiving
- 25 a request over the Internet, wherein the receiving, comparing, performing, and reporting are performed without additional human intervention.

5. The method of claim 1, further comprising providing to the user a user interface to allow the user to enroll with the system to establish the access rights.

6. The method of claim 5, wherein the enrollment is performed over the Internet without additional human intervention.

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7. The method of claim 1, wherein the processing includes performing one or more of fluorescence, optical density, mass spectroscopy and DNA sequencing.

10 8. The method of claim 1, wherein performing a requested test includes identifying in the profile one or more of the genes identified in Table 1.

9. A method comprising:

15 receiving over the Internet from a third party user a request to access a stored genetic profile of a patient to perform a medical test to determine the presence or absence of a gene or marker associated with a specified disease;

determining whether the third party user is authorized to access the profile for the purpose of the requested medical test based on stored access rights provided by the patient;

20 if the third party user is authorized for access and to perform the test, performing the test on the profile and reporting the results to the third party user requesting the test information; and

if the third party user is not authorized for access and to perform the test, denying access to the third party user and not performing the test.

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10. The method of claim 9, further comprising providing to the user a user interface to allow the user to voluntarily enter information to establish access rights.

11. The method of claim 10, wherein the entry of information is performed without additional human interventions.

12. The method of claim 9, wherein the access rights include at least one third party that has rights to access the profile for purposes of performing some
5 medical tests and not for performing other medical tests.

13. The method of claim 9, wherein performing the test includes determining whether a specific genetic marker is present or not.

10 14. The method of claim 9, wherein performing the test includes determining whether a specific gene is present or not.

15. A system comprising:
a database for storing genetic profiles of patients;
15 a testing system for performing medical tests on genetic profiles; and
a processing system:

providing to the patient a user interface for the patient to voluntarily enter information to establish access rights for authorizing access for third party users and
20 purposes for which the third party users can gain access,

using the access rights to control access to the database when access is requested by third party users,

25 in response to a request by a third party user for a test on the profile, checking the access rights to determine whether the third party is authorized and whether the test is authorized, and,

if the third party is authorized causing the testing system to perform the test, and providing test results to the authorized entity.

16. The system of claim 15, wherein the profiles are stored in such a way that one or more of a plurality of genetic markers associated with specific diseases
5 can be identified.

17. The system of claim 15, wherein the processing system includes a web server for providing the user interface to the patient.

10 18. The system of claim 15, wherein the processing system provides a third party interface to the third party for seeking access without additional human intervention.

15 19. The system of claim 15, wherein the genetic profiles include SNP maps.

20. The system of claim 15, wherein the user can establish access rights and the third party can try to obtain access all without additional human intervention.

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